20020919.ba v03_n395.bam.20020919

>From ???@??? Thu Sep 19 08:52:04 2002 -0500
Message-Id: <200209191351.g8JDpthw022705@sco.theporch.com>
Date: Thu, 19 Sep 2002 08:51:30 CDT
From: Old Tube Radios <boatanchors@theporch.com>
To: Old Tube Radios <boatanchors@theporch.com>
Subject: BOATANCHORS digest 3395

# BOATANCHORS Digest 3395

Topics covered in this issue include:

1) WW2 War Dep Radio System and 5th Signal Service Company
   by Al Klase <skywaves@bw.webex.net>
2) Wireless Set No. 19
   by Smith <smithab11@comcast.net>
3) Re: Wireless Set No. 19
   by Jerry Proc <jerry.proc@sympatico.ca>
4) FW: Wireless Set No. 19
   by "Ed Sieb" <esieb@sympatico.ca>
5) National Multiband Tank Circuits
   by "Paul Monroe" <pmonroe@charter.net>
6) Simpson 263
   by "Rhett T. George" <rtg@ee.duke.edu>
7) super-glue subject, cont'd
   by third Eric <ejones@hiwaay.net>
8) Re: Simpson 263
   by "Al Parker" <anchor@ec.rr.com>
9) For Sale: C-48/ARC-5, Invaders, Sig Gen
   by Merz Donald S <merz.ds@mellon.com>
10) Re: Simpson 263
   by Richard Loken <richardlo@devax.admin.athabascau.ca>
11) Help with part
   by "Terry O'Laughlin" <terryo@wort-fm.terracom.net>
12) Lightning protection for open-wire lines?
   by John Poulton <jp@cs.unc.edu>
13) Re: Lightning protection for open-wire lines?
   by Bob Roehrig <broehrig@aurora.edu>
14) USS COBIA Radar Update
   by Tom Aschenbrenner <boat@Aschen.com>
15) Re: USS COBIA Radar Update-supplier 26?
   by Scott Robinson <spr@earthlink.net>
16) Re: USS COBIA Radar Update-supplier 26?
   by "A. B. Bonds" <ab@vuse.vanderbilt.edu>
17) RE: USS COBIA Radar Update-supplier 26?
   by Morris Odell <MorrisO@vifp.monash.edu.au>
18) RE: USS COBIA Radar Update-supplier 26?

by "Marty's Refl. Drop" <polepeeg@aa4rm.ba-watch.org>
19) Supplier 26 Identified
by Tom Aschenbrenner <boat@Aschen.com>
20) Re: USS Cobia needs radar advice
by Tom Aschenbrenner <boat@Aschen.com>
21) Re: Lightning protection for open-wire lines?
by "Paul Christensen" <w9ac@arrl.net>
22) Re: Lightning protection for open-wire lines?
by "Tom Smith" <tsmith@hal-pc.org>

---

Message-ID: <3D866521.CD127729@bw.webex.net>
Date: Mon, 16 Sep 2002 19:11:29 -0400
From: Al Klase <skywaves@bw.webex.net>
MIME-Version: 1.0
To: Old Tube Radios <boatanchors@theporch.com>
CC: jfenn@lava.net
Subject: WW2 War Dep Radio System and 5th Signal Service Company
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Gentlemen,

Can any of you help John?  Please include him in any replies
as he's not yet associated with these lists.

Thanks,
Al

> Subject: WW2 War Dep Radio System and 5th Signal Service Company
> Date: Tue, 10 Sep 2002 12:25:17 -1000 (HST)
> From: jfenn@lava.net.
> To: k2mp@eznet.net
>
> I was referred to this link as info not available on the QCWA
> reflector.   During WW2 I was a WAR DEP Radio opr serving in
> varous 5th Signal Service Detachments.   I was at stations
> such as WVN, WHZ (canal Zone) WVR Ft Mcpherson Ga, and from all
> these points we communicated direct with WAR in Washn DC.
> Have been trying to find out what happened to the old 5th Sig
> SVC company.   Also other members of QCWA were at WAR itself and
> their Signal Company was the 15th Signal Service Co.  They likewise
> have been unable trace what happened to these Signal Service Companys.
> Did they just fade away or were they replaced by other units??
> Ft Gordon is the Archives for all Signal Corps matters and we have
> querried them, but they have no record of the 5th Sig Svc nor the
> 15th Sig Svc.    Would anyone in your organization have any info
> on this matter.

>       Joe Fenn   former Master/Sgt but left SVc in 1945 Oct.

--
Al Klase - N3FRQ
skywaves@bw.webex.net
Flemington, NJ 08822
Web Page:  http://www.webex.net/~skywaves/home.htm

------------------------------
Date: Mon, 16 Sep 2002 19:41:01 -0400
From: Smith <smithab11@comcast.net>
Subject: Wireless Set No. 19
To: Old Tube Radios <boatanchors@theporch.com>
Message-id: <003101c25dda$83cb7d00$06f12144@dover01.de.comcast.net>
MIME-version: 1.0
Content-type: text/plain; charset=Windows-1252
Content-transfer-encoding: 7BIT

I picked up a nice Wireless Set No. 19 at the MRCA meet in Gilbert.
Does anyone know of a source for the Variometer tuning unit and the carrier
or radio mount?

Breck  K4CHE Dover, Delaware,
annt nutten in Dover, except chickens, a NASCAR track and hams that cant
solder.

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Message-ID: <3D867CFA.693909DE@sympatico.ca>
Date: Mon, 16 Sep 2002 20:53:14 -0400
From: Jerry Proc <jerry.proc@sympatico.ca>
MIME-Version: 1.0
To: Old Tube Radios <boatanchors@theporch.com>
CC: Old Tube Radios <boatanchors@theporch.com>
Subject: Re: Wireless Set No. 19
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Hi Breck,

This would be a golden opportunity to introduce you to the 19 set web page.
http://www.qsl.net/ve3bdb/

A dedicated group of 19 set owners will supply you with ample advice.
Contact the webmaster for advice on how to join the 19 Set Mail List.

---
Smith wrote:

> I picked up a nice Wireless Set No. 19 at the MRCA meet in Gilbert.
> Does anyone know of a source for the Variometer tuning unit and the carrier
> or radio mount?
>
> Breck  K4CHE Dover, Delaware,
> annt nutten in Dover, except chickens, a NASCAR track and hams that cant
> solder.

--

Regards,
Jerry Proc VE3FAB
Toronto, Ontario
e-mail: jerry.proc@sympatico.ca
http://webhome.idirect.com/~jproc/ve3fab

---

From: "Ed Sieb" <esieb@sympatico.ca>
To: Old Tube Radios <boatanchors@theporch.com>
Subject: FW: Wireless Set No. 19
Date: Mon, 16 Sep 2002 20:01:30 -0400
Message-ID: <LOBBJHOLOOHLIPLONIAFMEPGFHAA.esieb@sympatico.ca>
MIME-Version: 1.0
Content-Type: text/plain;
    charset="Windows-1252"
Content-Transfer-Encoding: 7bit

Smith wrote:

> Does anyone know of a source for the Variometer tuning unit
> and the carrier or radio mount?

Get in touch with Chris, VE3CBK, or Bob, VE3BDB
ve3bdb@rac.ca
or
ve3cbk@rac.ca

They may know of sources.
Check out their indispensible website:
http://www.qsl.net/ve3bdb/

Ed - VA3ES

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Message-ID: <001101c25df1$2c835060$20f29f18@computer>
From: "Paul Monroe" <pmonroe@charter.net>
To: Old Tube Radios <boatanchors@theporch.com>

Subject: National Multiband Tank Circuits
Date: Mon, 16 Sep 2002 21:23:12 -0500
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Is anyone on the list familiar with the National 5-B-100 multiband tank circuit. I have seen an advertisement for it on the back cover of RADIO for Novermber, 1941. This tank used 2 variometer style coils coupled to a multi-section capacitor.

The ad states "the L/C ratio remains at the correct value for all frequencies, despite the wide range." This is in contrast to the post-war MB-150 and MB-40 units that had very high (>30) loaded Q at higher frequencies. Anybody got one (a 5-B-100)? The MB150 and MB 40 are fairly common at hamfests.

On another matter, does anyone on the list have a copy of RADIO for September, 1941 that they would be willing to sell.

73,
Paul, W9MEH

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From: "Rhett T. George" <rtg@ee.duke.edu>
Date: Tue, 17 Sep 2002 10:50:29 -0400 (EDT)
Message-Id: <200209171450.g8HEoTw01892@atlantic.ee.duke.edu>
To: Old Tube Radios <boatanchors@theporch.com>
Subject: Simpson 263

- Greetings -

Again I seek a bit of wisdom from this august group.

The Simpson 263 uses a 1.5 V cell for the lower ohmmeter ranges. What, prithee, is the battery for the higher ranges? Many thanks for responding.

73 Rhett - KE4HIH

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Date: Tue, 17 Sep 2002 10:45:09 -0500 (CDT)
Message-Id: <v03007804b9acac22f5b4@[216.180.65.179]>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"
To: Old Tube Radios <boatanchors@theporch.com>
From: third Eric <ejones@hiwaay.net>
Subject: super-glue subject, cont'd

de N4TGC Eric

Or, making glue from horses beat to death ... Barry Ornitz pointed up the main reason cyano-acrylic glue won't work well on tube bases and caps: they need a FILLER glue, which "super" glue is very much not.  (I've also used common two-part epoxy on bases and caps, with equally disastrous, but only 1-out-of-ten results: not acceptable, for irreplaceable old tubes!)

The upshot seems to be to try to use a binder similar to the original, which appears to be "foamy" and "powdery": this not only allows it to fill voids, but to come loose where the glass pulls too much (hence the all-too-common loose base: remember, tubes were generally intended to be limited-life consumer items!)  Rubbery silicone glues are suitable, but: they require a full seven days to cure, and will be conductive for the first two or so (dampness supposedly helps the cure), so I lean toward hydrocarbon-based rubbery cements, which only catch fire when wet ...

FWIW, silicone glass-sealer does not ever fully harden - it's designed to flow into cracks and remain flexible "forever". Somebody try it and tell us what they think - I mistakenly used it to seal an outdoor outlet cover, and two years later, had to dig it off and re-do it with regular Si glue, as the Si glass-sealer oozed down the vinyl and attracted dirt!

e

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Message-ID: <0ed001c25e79$fd4eaa40$3201a8c0@w8ut>
From: "Al Parker" <anchor@ec.rr.com>
To: Old Tube Radios <boatanchors@theporch.com>
Subject: Re: Simpson 263
Date: Tue, 17 Sep 2002 14:42:34 -0400

Hi Rhett,

From the 260 manual --  the 260 uses one "large" 1.5v cell for low range, and 4 "small" 1.5v cells in series to furnish 7.5v for the Rx10,000 range.  I'm not sure what size, but I've got a 260 & will open it up for you if you want.  (don't know what dif. between 260 & 263)

73 (nice to see you at Shelby),
Al, W8UT
New Bern, NC
BoatAnchors appreciated here
http://www.thecompendium.net/radio/
http://www.hammarlund.info

----- Original Message -----
From: "Rhett T. George" <rtg@ee.duke.edu>Subject: Simpson 263

> The Simpson 263 uses a 1.5 V cell for the lower ohmmeter ranges.  What,
> prithee, is the battery for the higher ranges?  Many thanks for

responding.
>
> 73 Rhett - KE4HIH
>
>

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Message-ID: <20020917190123.12004.qmail@mellon.com>
From: Merz Donald S <merz.ds@mellon.com>
To: Old Tube Radios <boatanchors@theporch.com>
Subject: For Sale: C-48/ARC-5, Invaders, Sig Gen
Date: Tue, 17 Sep 2002 15:00:09 -0400
MIME-Version: 1.0
Content-Type: multipart/alternative;
     boundary="----_=_NextPart_001_01C25E7C.7162A100"

This message is in MIME format. Since your mail reader does not understand
this format, some or all of this message may not be legible.

------_=_NextPart_001_01C25E7C.7162A100
Content-Type: text/plain;
     charset="iso-8859-1"

For Sale

C-48/ARC-5: WWII-era Navy command set control box. This is one of the ones
with
the volume control and PTT relay. The C-48 was designed to be daisy-chained
throughout the aircraft. This box has the 2-pin pigtail wire for the H-46/UR
boom mic. New, old stock, in opened box. $29

C-48/ARC-5: Same as above except VERY USED with peeling paint and general
ugliness. No holes or dents. Just dirt and bare aluminum. $9

E. F. Johnson Invaders (2). Early HF SSB transmitter. This is the 200 watt
version, not the larger Invader 2000. I have not tested either of these. But
one of them looks
doggone good with an excellent front panel while the other one is a mess.
The good one has the crystals in it--the other one doesn't. The good one has
all of its tubes while the other one is missing finals and driver. The good
one has all of its knobs but the other one is missing one knob. Even the
good one is not without problems--the dial drum does not work right and the
bandswitch does not indicate the bands correctly. But those seem like
easily-correctable problems. Both are electrically untested. Both seem in
good shape and OK to apply power. But who knows. Offered here as-is. Maybe
make one good one out of these two. With original manual. $140/both

Browning Signal Generator. This weird signal generator has a tuning eye at the top of the case which is shaped like a skinny metal broadcast radio. The paint is a light brown wrinkle with some light stains on it in spots. Controls are minimal--frequency dial, band switch and output level. Looks all original and unmodified. Untested and as-is. Is this the Browning of Browning/Drake fame? I have no clue. $15

Thanks.
73, Don Merz, N3RHT

*****************************************************************
DISCLAIMER:   The information contained in this e-mail may be confidential and is intended solely for the use of the named addressee.  Access, copying or re-use of the e-mail or any information contained therein by any other person is not authorized.  If you are not the intended recipient please notify us immediately by returning the e-mail to the originator.

------_=_NextPart_001_01C25E7C.7162A100
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

* * * * * * * * * * * * * * * * * * * * * * * * * * * * * *
*         ---REMAINDER OF MESSAGE TRUNCATED---           *
*     This post contains a forbidden message format      *
*  (such as an attached file, a v-card, HTML formatting)  *
*    Mail Lists at theporch.com only accept PLAIN TEXT    *
* If your postings display this message your mail program *
* is not set to send PLAIN TEXT ONLY and needs adjusting  *
* * * * * * * * * * * * * * * * * * * * * * * * * * * * * *

------_=_NextPart_001_01C25E7C.7162A100--

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Date: Tue, 17 Sep 2002 13:06:02 -0600 (MDT)
From: Richard Loken <richardlo@devax.admin.athabascau.ca>
Subject: Re: Simpson 263
To: Old Tube Radios <boatanchors@theporch.com>
Cc: Old Tube Radios <boatanchors@theporch.com>
Message-id:
 <Pine.PMDF.3.95.1020917130106.543214259C-100000@devax.admin.athabascau.ca>
MIME-version: 1.0
Content-type: TEXT/PLAIN; charset=US-ASCII

On Tue, 17 Sep 2002, Al Parker wrote:

>     From the 260 manual --  the 260 uses one "large" 1.5v cell for low
> range, and 4 "small" 1.5v cells in series to furnish 7.5v for the Rx10,000

> range. I'm not sure what size, but I've got a 260 & will open it up for you
> if you want. (don't know what dif. between 260 & 263)

The 260 used several differant batteries for the resistance scales over its long production life but the 1.5V D cell was always there. Therefore, there is no telling what the 263 used. My AVO 8 uses an interesting and expensive rectangular carbon zinc cell that sells for about $15.00 but it has a long life - its the 1.5V D cell that has a short life in both the Simpson 260 and the AVO 8.

---

Richard Loken VE6BSV, Systems Programmer - VMS
Athabasca University
Athabasca, Alberta Canada
** richardlo@admin.athabascau.ca **

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Message-Id: <5.1.0.14.2.20020918082458.00bb14b0@pop.terracom.net>
Date: Wed, 18 Sep 2002 08:26:48 -0500
To: Old Tube Radios <boatanchors@theporch.com>
From: "Terry O'Laughlin" <terryo@wort-fm.terracom.net>
Subject: Help with part
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"; format=flowed

I need a 50 microamp meter in the same package as the meters in the R-390 to help a friend restore a piece of gear. Anyone know where I can find one?

Thanks,
Terry O' WB9GVB

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Date: Wed, 18 Sep 2002 16:41:38 -0400 (EDT)
From: John Poulton <jp@cs.unc.edu>
To: Old Tube Radios <boatanchors@theporch.com>
Subject: Lightning protection for open-wire lines?
Message-ID: <Pine.GSO.4.10.10209181619030.2288-100000@capefear.cs.unc.edu>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

I'm in the process of designing a lightning bulkhead for a new shack. PolyPhaser makes nice lightning protection devices for coaxial lines, but what's the best thing to do for open-wire lines and for single-ended feeds, such as long-wires and inverted L's?

I considered just using a pair of PolyPhaser protectors; probably be ok from an impedance matching point of view, since they're physically small. However, I'm concerned about the turn-on voltage, which is listed as 600V and 1200V for "L" and "H" models for a lightning strike (whatever the heck THEY are!). Line voltage on a 450-ohm feeder is going to be about 1KV peak at 1KW of power, so it seems likely that the PolyPhaser devices might turn on during normal operation, (each'll see roughly half the peak line voltage), which could ruin one's day. Situation could be even worse for a long-wire, if the feed point ends up being a high impedance.

One idea that occurred to me: use a ceraimc insulator to pass the line through the bulkhead, then protect each side with a discharge device made from a spark plug. Assuming 75KV/inch, a typical value for spark gap voltages, a plug (at atmospheric pressure) should turn on at about 2KV, which is about 2x the line voltage at 1KW.

Anyone have opinions, experiences, or suggestions about this matter?

73, John KF4OZY

---

Date: Wed, 18 Sep 2002 16:53:28 -0500 (CDT)
From: Bob Roehrig <broehrig@aurora.edu>
To: Old Tube Radios <boatanchors@theporch.com>
cc: Old Tube Radios <boatanchors@theporch.com>
Subject: Re: Lightning protection for open-wire lines?
Message-ID: <Pine.OSF.4.43.0209181652130.358076-100000@mail.aurora.edu>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

On Wed, 18 Sep 2002, John Poulton wrote:

> One idea that occurred to me: use a ceraimc insulator to pass the line through the bulkhead, then protect each side with a discharge device made from a spark plug. Assuming 75KV/inch, a typical value for spark gap voltages, a plug (at atmospheric pressure) should turn on at about 2KV, which is about 2x the line voltage at 1KW.

Spark plugs wouldn't hurt - I've heard of that before. Although make sure they are NOT the type with built-in resistance.

I just use a big old DPDT knife switch that grounds the feeders when not in use.

Bob Roehrig
Aurora University Telecom/IS dept.
broehrig@aurora.edu
73 de K9EUI

---

Message-ID: <3D88F7A7.6E5F4A96@Aschen.com>
Date: Wed, 18 Sep 2002 17:01:11 -0500
From: Tom Aschenbrenner <boat@Aschen.com>
MIME-Version: 1.0
To: Old Tube Radios <boatanchors@theporch.com>
Subject: USS COBIA Radar Update
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

First off, thanks to all the people on this list that have helped the project...some by parts supply and some by information supply.

Now, to the status:  Have you ever had one of those projects where you start out trouble shooting one thing but then find you have fix something else before you can proceed, but then find out you have to fix something else, then something else etc. etc. Well that's what happened on this last 5 day trip up to the COBIA. It started out as a simple "put a RF probe into the waveguide to look at the transmitted pulse shape". Well, it didn't look good so worked back to the drive for the pulse modulator..looked worse, worked back to the "on-time" control circuit...looked really bad. I began to wonder how the thing even was working as it was!

Long story short, it turned out that the timing generator was way off and the adjustment pots were at the end of the range indicating that this was a trouble the shipboard guys dealt with as well. I should add that I discovered the radar has not been operational since the end of the boats training duty in 1953.

Some component checking resulted in the discovery that there were resistors that were WAY off required value. All off these were made by "supplier 26". After a quick check in the timing generator of other resistors from the same supplier I found they had ALL changed...and I'm not talking a little, e.g. 150K turned into 1Meg and others were just as bad. Now in an analog circuit there might be more forgiving design but in this digital timing circuit these changes were a killer. The good news is that the Navy had two suppliers for the resistors used in this unit and the other suppliers units were right where they should be.

So....the modulation generator was removed from the radar as well as the IF pre-amp and local osc module. These I brought back to Dallas and will fix the resistors as well as check the timing caps.

This also gives me time to get the dummy load. Thanks to all the folks that responded to Lenox's request on my behalf.

The next trip is in two weeks so I will be able to bring other units back for the component work. After a quick study of the manual the other units that use "supplier 26" resistors explains why I see the other troubles that the radar has...e.g., the A-scope has a retrace trouble and sure enough the retrace blanking one-shot uses my favorite resistors...same story with the range pulse generator.

Tom A

---

Message-Id: <5.1.0.14.0.20020918154649.01ce9ee8@mail.earthlink.net>
Date: Wed, 18 Sep 2002 15:48:06 -0700
To: Old Tube Radios <boatanchors@theporch.com>
From: Scott Robinson <spr@earthlink.net>
Subject: Re: USS COBIA Radar Update-supplier 26?
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"; format=flowed

At 05:01 PM 9/18/2002 -0500, you wrote:

> Some component checking resulted in the discovery that there were resistors that were WAY off required value. All off these were made by "supplier 26". After a quick check in the timing generator of other resistors from the same supplier I found they had ALL changed...and I'm not talking a little, e.g. 150K turned into 1Meg and others were just as bad. Now in an analog circuit there might be more forgiving design but in this digital timing circuit these changes were a killer. The good news is that the Navy had two suppliers for the resistors used in this unit and the other suppliers units were right where they should be.

and Scott wonders:

Just who might "supplier 26" be?  It's probably safe to mention the name since they are likely no longer in business.

Curiously yours,

/scott

---

Message-Id: <5.1.0.14.0.20020918181346.00aff570@vuse.vanderbilt.edu>
Date: Wed, 18 Sep 2002 18:15:38 -0500
To: Old Tube Radios <boatanchors@theporch.com>
From: "A. B. Bonds" <ab@vuse.vanderbilt.edu>

Subject: Re: USS COBIA Radar Update-supplier 26?
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"; format=flowed

At 03:48 PM 9/18/2002 -0700, you wrote:
>At 05:01 PM 9/18/2002 -0500, you wrote:
>
>>   Some component checking resulted in the discovery that there were
>>resistors that were WAY off required value. All off these were
>>made by "supplier 26". After a quick check in the timing generator
>>of other resistors from the same supplier I found they had ALL
>>changed...and I'm not talking a little, e.g. 150K turned into 1Meg
>>and others were just as bad. Now in an analog circuit there might
>>be more forgiving design but in this digital timing circuit these
>>changes were a killer. The good news is that the Navy had two suppliers
>>for the resistors used in this unit and the other suppliers units
>>were right where they should be.
>
>
>and Scott wonders:
>
>Just who might "supplier 26" be?  It's probably safe to mention the name
>since they are likely no longer in business.
Dunno, but what I can say is that in general (DoD and consumer equipment)
half-watt resistors that have a rough casing (as opposed to a smooth molded
casing) have a marked tendency to go high, and I always zero in on those first.

A. B. Bonds

------------------------------
Message-ID:
<07A064EA6042D4118A62009027F70E771821BC@nt_exchange.vifp.monash.edu.au>
From: Morris Odell <MorrisO@vifp.monash.edu.au>
To: Old Tube Radios <boatanchors@theporch.com>
Subject: RE: USS COBIA Radar Update-supplier 26?
Date: Thu, 19 Sep 2002 09:45:54 +1000
MIME-Version: 1.0
Content-Type: text/plain;
     charset="iso-8859-1"

Anchorites,

A.B. wrote:

> what I can say is that in general (DoD and
> consumer equipment)
> half-watt resistors that have a rough casing (as opposed to a
> smooth molded

> casing) have a marked tendency to go high, and I always zero
> in on those first.

I've had that experience too, and I've also noticed that sometimes one particular value is more prone to it than others. eg: you might find all the 47K resistors have drifted but 100K of the same type are OK. I find that the high quality (?Allen Bradley) smooth resistors used in Tek gear from the 1950-60 era are almost never out of spec.

Those cheaper rough cased carbon resistors usually of 10% tolerance used by other manufacturers are dreadful. I have an Australian HF receiver that has sealed modules full of them which I keep putting further down the stack of things to do but which will need "re-resistoring" eventually. Paradoxically it comes from an epoch in the 1960s when the new-fangled plastic caps were more reliable than the resistors.

73, Morris

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Date: Wed, 18 Sep 2002 20:15:38 -0400 (EDT)
From: "Marty's Refl. Drop" <polepeeg@aa4rm.ba-watch.org>
Message-Id: <200209190015.UAA04008@aa4rm.ba-watch.org>
To: Old Tube Radios <boatanchors@theporch.com>
Subject: RE: USS COBIA Radar Update-supplier 26?

IRC made "rough-case resistors" & the little ones, at least, had a tendency to go open-circuit.

If carefully removed from a circuit, more often that not a lead would either be loose in the case or fall out

Now watch some bottom-70% lawyer pop up stating I'm defaming a little-known advocacy group.  Say the Indiana Refuge Coalition.

(btw - great good goin' on the radar Tom)

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Message-ID: <3D891914.94D09E9B@Aschen.com>
Date: Wed, 18 Sep 2002 19:23:48 -0500
From: Tom Aschenbrenner <boat@Aschen.com>
MIME-Version: 1.0
To: Old Tube Radios <boatanchors@theporch.com>
Subject: Supplier 26 Identified
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Well, since you asked:

supplier 26:

International Resistance Corp.
Philadelphia, Pa.

As noted by Allen, These resistors are "rough cased".

the supplier whose resistors are in spec (supplier 4):

Allen-Bradley Co.
Milwaukee, Wi.

These resistors are "smooth cased".

tom a

---

Message-ID: <3D892014.964B8E1D@Aschen.com>
Date: Wed, 18 Sep 2002 19:53:40 -0500
From: Tom Aschenbrenner <boat@Aschen.com>
MIME-Version: 1.0
To: Old Tube Radios <boatanchors@theporch.com>
Subject: Re: USS Cobia needs radar advice
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Barry,

Thanks for info. I think I have the dummy load thing under control.

Another question for you. The window covering the waveguide up at the antenna is made of polystyrene(sp?) of the WWII vintage. It is about 1/2 inch in depth. It is also very weathered and looks like is was hit with a round during the war judging from the crack.

Is this stuff still available (needs to be WWII mix since the window acts as part of an impedance transformer from the waveguide to free space)? If not, I wonder what a good substitute would be?

tom a

"Barry L. Ornitz" wrote:
>
> Lenox Carruth asked:
>
> > Tom Aschenbrenner is up at the USS Cobia in Manitowoc,
> > Wisconsin.  He has the SJ radar licensed and believes
> > that it is working but is suspicious that there is a
> > problem in the antenna.  This is a World War II era
> > S-band search radar for submarines.
> >
> > The question is:  Does anyone have any idea what could be
> > used as a cheap and dirty field expedient dummy load?
>
> Waveguide of coaxial cable output?
>
> If coax, a good Bird dummy will work with perhaps a little
> higher VSWR than on the lower bands.
>
> If waveguide, you can use the tricks like they did years
> ago.  Take a section of waveguide and fill it partially
> with water.  Attach this to the waveguide output such that
> the waveguide is tilted slightly from horizontal.  This
> makes the surface of the water form a small angle running
> across the waveguide.  This is for impedance matching.
> This will work well for short time use until the water
> boils away!
>
> For lower power, a piece of slightly moist wood can be
> used.  Again cut the wood in the shape of a doorstop to
> provide the angle.
>
> Some commercial radar dummy loads used concrete filled with
> carbon black and ferrite powder.
>
> Have Tom contact me if he needs to build a flowing water
> unit good for higher average power.  There are a few tricks
> about how the waveguide should be drilled for the Teflon
> tubing carrying the water.
>
>         73,  Barry L. Ornitz     WA4VZQ     ornitz@tricon.net

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Message-ID: <002d01c25fe0$eb54a020$6401a8c0@se1.client2.attbi.com>
From: "Paul Christensen" <w9ac@arrl.net>

To: Old Tube Radios <boatanchors@theporch.com>
Subject: Re: Lightning protection for open-wire lines?
Date: Thu, 19 Sep 2002 09:31:53 -0400
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

> I just use a big old DPDT knife switch that grounds the feeders when not
> in use.

Yet another option which I use successfully here in the lightning capital of the world (Florida), is a pair of N.O. SPST 75KV Jennings vacuum relays to function as the disconnecting "knife switch." The relay pair is located outside the house and the relays activate/de-activate automatically when with the rig's on/off power switch.

-Paul, W9AC

---

From: "Tom Smith" <tsmith@hal-pc.org>
Subject: Re: Lightning protection for open-wire lines?
To: Old Tube Radios <boatanchors@theporch.com>
Date: Thu, 19 Sep 2002 08:51:17 -0500
Message-ID: <web-20589601@mail.hal-pc.org>
MIME-Version: 1.0
Content-Type: text/plain; charset="ISO-8859-1"; format="flowed"
Content-Transfer-Encoding: 8bit

My solution is rather low tech but so far has been effective through two known hits that got to stuff in the house.

I have a 6" X 12" copper plate that I use as a buss bar and have it connected to several close ground rods using three runs of high quality automotive jumper cable (don't know what guage but the conductor is nearly the diameter of my little finger (+- 3/8"). I have attached uhf and N female connectors to the copper plate in such a way to short both center conductor and shield to the copper plate. Whenever I'm away from the shack (and any antenna I'm not using even when I'm there) is screwed to the connectors on the copper plate. Like I say, no fancy switches, bells and whistles but so far has been effective.

73
Tom  N5AMA

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On Thu, 19 Sep 2002 09:31:53 -0400
  "Paul Christensen" <w9ac@arrl.net> wrote:
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>>feeders when not
>> in use.
>
>Yet another option which I use successfully here in the
>lightning capital of the world (Florida), is a pair of
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>Jennings vacuum relays to function as the disconnecting
>"knife switch."  The relay pair is located outside the
>house and the relays
>activate/de-activate automatically when with the rig's
>on/off power switch.
>
>-Paul, W9AC
>

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End of BOATANCHORS Digest 3395
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